

THAT WHICH IS CLAIMED:

1. A method of constructing a system for attenuating a pressure blast and mitigating blast damage to a structure, the method comprising:

5 determining a maximum initial pressure P_i against which the structure is to be protected;

determining an acceptable pressure P_f to which the structure may be subjected;

selecting an attenuation material comprised of particles having a radius r , a mass density ρ_p , and a three-dimensional packing factor F ;

10 determining a minimum thickness D of a particle mist of the attenuation material required to reduce the initial pressure to the acceptable pressure, said determining step comprising determining the minimum thickness D as follows:

$$D = 1.24 \frac{r}{F^{\frac{11}{12}}} \left(\frac{\rho_p}{\rho_a} \right)^{\frac{1}{4}} \left[\ln \left(\frac{P_i}{P_f} \right) \right]^{\frac{1}{2}} ; \text{ and}$$

15 mounting a delivery system to the exterior surface of the structure, said delivery system being capable of providing the particle mist at least as thick as the determined minimum thickness D .